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ABSTRACT

Problems of estimating college enrollments are addressed, with attention to shortfalls caused by smaller cohorts of traditional students and attempts to enroll adult students. Emphasis is placed on student credit hours (SCH) generated and on participation rates of adults. Full-time equivalency is defined as 24 SCH per student. Adult enrollment is defined as students 25 years and over in all categories of degree-credit instruction. Predictions based on a state population base are discussed, along with calculations at individual institutions. Data for a state are presented that indicate that an effort to increase the participation rates of adults will be necessary to increase the extent to which shortfalls can be moderated. Increasing the number of SCH per adult would also help in this effort but it may not be possible to increase it over 10 credits a year per student. Increasing participation rates will be an effective approach. The shortfalls in regular students have been gradual over the past few years, but beginning in 1983 a greater decline will be apparent. Another jolt will occur in 1990 when another large decline in freshmen will be apparent. (SW)

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Moderating Enrollment Shortfalls Through Increased Adult Participation in College: Problems in Estimation

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Many administrators plan to offset enrollment shortfalls of younger students by tapping the adult market more fully. As has been said by many persons in many places, low birth rates for the period of 1962 - 1978 will result in enrollment shortfalls for 1980 - 1996. On the other hand, many of the baby boom babies will enter the adult years in 1980 - 1996 and create an elder boom of a sorts, with an accompanying increase in demand for college degree level instruction.

Many administrators are finding it difficult to estimate the strength of this demand in their service areas and to estimate the degree to which enrollment of adult students will moderate shortfalls in the enrollment of traditional age students. Most adult students enroll for partial instead of full loads and participation rates vary from less than one percent for the older (55-60 year-olds) to slightly more than nine percent for the younger cohorts of adults (25-29 year-olds). On the other hand, some 35 cohorts (adults from ages 25 to 60) can be expected to enroll rather regularly for credit courses at colleges and universities. This compares favorably with the seven cohorts associated with regular college students (ages 18 to 24).

Given all the factors which must be considered, it is understandable that estimations of shortfall moderation can be a problem. By focusing on SCH (student credit hours generated) and on participation rates of adults, some light is shed on this problem. If increases in adult cohort

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size as the elder boom moves through the participation years can be included in the calculations, estimation can become more precise.

Scenario and Data for An Estimation

A state enrolls 150,000 FTE students with FTE defined as 24 SCH per student. These students generate 3.6 million SCH annually. Using birth rates for 1962 - 1978, administrators conclude that enrollment of regular students (18-24 years of age) will decline by 30,000 FTE and that the corresponding decline in SCH will approximate 720,000. This estimate assumes a constant rate of adult enrollment with fluctuations limited to regular students. Adult enrollment is defined here as enrollment of students 25 years and over in all categories of degree credit instruction. It includes both undergraduate and graduate students.

While these figures relate to a state population base, administrators at individual institutions work out estimates for their schools by applying multiplier variables related to their market shares of students. For example, Institution A enrolls 15,000 FTE students or ten percent of the FTE for the state. Administrators at A expect something in the neighborhood of a ten percent decrease in SCH due to declines in the numbers of younger students. Market shares of adult students are computed in the same manner, with adjustment for rural or urban locations.

Estimation of Moderation

While the above data assumes a constant rate of adult SCH, true estimation must assume that the SCH for adults will indeed increase as the "pig passes through the python", i.e., as the cohorts with large numbers of adults pass through the ages where participation in higher education is the norm for a significant number of adults. It is the increase in

adult enrollment stemming from this natural increase in population base which will generate much of the added SCH to moderate the enrollment shortfalls on many campuses. Further, this basic increase can be expanded by increasing the rates of participation of adults in a community, increasing the number of credit hours taken by these students, or both. Many institutions will attempt to do both. If, for example, Institution A finds that the average student signs up for eight credits a year and that eight percent of his/her adult cohort signs up for courses each year, efforts might be made to increase the number of credits taken to ten and the percent of participation to nine or ten percent. While the increases in credits and percent participation seem small, they generate substantial increases in SCH as will be seen in the following discussion and tabular analysis.

To compute the estimate for moderation, the increase in adult SCH must be ascertained when data for a time frame are compared. This increase is then subtracted from the shortfall for actual SCH moderation and computed as a percent of shortfall to express moderation of shortfall in percentage terms. The decade of 1980 - 1990 was selected for this exercise.

To compute the adult SCH for 1980 and the increases in adult SCH for 1990 over 1980, multiplier variables obtained from the U.S. Census Bureau report on participation rates of adults in degree credit instruction in college (U.S. Census Bureau, 1981) were applied to the 35 cohorts of adults commonly considered as potential enrollees for degree credit instruction. These cohorts ranged in age from 25 to 60 and as is shown in Table 2, the participation rates varied from 0.6 percent for the six cohorts in the 55-60 year range to 8.9 percent for the five cohorts in the 25-29 year range.

Participation in college among adults is inverse to age. Data on births for the state in question were secured from the state health department and projected as adult cohorts, i.e., the 45,000 or so babies born in 1965 were projected as 45,000 adults, 25 years of age, for 1990. This procedure was cross-checked with state and county data books of the U.S. Census Bureau. The state has a balance in migration (in-migration and out-migration) and few adjustments were necessary. In instances where marked imbalances are apparent, the cohorts can be adjusted accordingly by applying imbalance multiplier variables for the age group in question to the cohorts under consideration.

As can be seen from Table 1, moderation of shortfalls in enrollment in this state in 1990 through increases in adult SCH would not be possible if the average adult student enrolled for only six credits a year. Fortunately, adults enroll for more credits and moderation is possible. The factor of six is included here to illustrate the complexities of such estimation and to emphasize the importance of attention to it. Many institutions enroll large numbers of adult students and administrators are often surprised at the failure of these enrollments to moderate shortfalls. The key is SCH. The adult students on these campuses are only taking a course or two. More adults taking more courses must become the byword.

The six factor is also included to illustrate complexities in estimation which are related to "pig in python" progression. While adults enrolling for six credits will not moderate shortfalls in 1990, they would effectively moderate shortfalls from 1980 to 1989. One reason for this is the entry of a remarkably small 25 year-old cohort into the progression for the year 1990. This is the 1965 cohort (25 years of age at 1990) which was fully six percent smaller than the 1964 cohort at birth.

It will be recalled that the Food and Drug Administration approved prescriptions and sales of birth control pills in early 1965. Since 25 year-olds are among the highest participation cohorts (25-29 year-olds), inclusion of a cohort with a precipitous decline in numbers precludes any moderation of shortfalls. Another reason is that the highest cohorts of all, adults born in 1955, 1956 and 1957 will have moved out of the ranks of high participation cohorts in 1990 and into the ranks of the lower participation cohorts (30-34). Table 2 contains data on participation rates for adults in degree credit instruction.

Table 1 indicates that the natural increase in adults in the state would increase adult SCH of 1990 over 1980 by 206,160. This is a moderation of shortfall of 30 percent. Recall the original estimation of a shortfall of 720,000 SCH. To bring about this moderation, however, the average adult student would have to enroll for ten credits each year. Fortunately for this state, adult degree credit enrollment exceeds this number.* Shortfall moderation would be on the order of 15 percent (see Table 1) if adults generated an average of eight credits a year.

Table 1
Increases in Adult SCH 1980 - 1990

Annual SCH per Adult	Year		Increase	Percent
	1980	1990		
6	287,449	264,971	-22,528	-.03
8	383,328	487,971	104,643	.15
10	478,960	685,120	206,160	.30

*Recall that adult students include both graduates and undergraduates.

As noted above, these data were computed by applying multiplier variables for participation rates to 35 cohorts of adults. Again, these participation rates were developed by the U.S. Census Bureau (1981). Again, Table 2 contains the participation rates for the affected cohorts.

Table 2
Adult Participation Rates
In Degree Credit Instruction

Adult Cohort Category by Age	Percent Participating in Degree Credit Instruction
25-29	8.9
30-34	6.2
35-39	4.2
40-44	3.0
45-49	2.2
50-54	1.3
55-60	0.6

Source: U.S. Census Bureau, Population Characteristics Series P-20, No. 362, 1981.

Note: For participation rates for cohorts aged 40 to 60, see technical data available from the education division of the Bureau.

Discussion

This paper addressed the problems of estimation in attempts by administrators to moderate shortfalls in enrollment caused by smaller cohorts of traditional students by enrolling adult students. As can be seen, moderation is possible to some extent through this process and estimation of the extent is also possible.

It is sobering to note that, contrary to what one reads in the paper and in some journals, a best case scenario of adults enrolling for ten credits a year will only moderate the shortfall by 30 percent. Clearly an effort to increase the participation rates of adults will be necessary to increase the extent to which shortfalls can be moderated. Increasing the number of SCH per adult would also help in this effort but it may not be possible to increase it much past ten credits a year. Most adult students work or look after families--some do both--and will be reluctant to sign up for heavy loads. Considerable room is apparent, on the other hand, for increases in participation rates. Many institutions have yet to develop comprehensive programs to involve adult students. Others are "waiting for adult students but are not ready for them" (Brazziel, in press). Many of these efforts will founder. Some institutions in rural areas have limited opportunities for effective expansion in this area.

The immediate future will likely see more effective efforts and a corresponding expansion of participation rates of adult students in college. The shortfalls in regular students have been gradual over the past few years but, beginning in 1983, a more precipitous decline will be apparent when the precipitous decline in the 1965 cohort makes itself felt in smaller numbers of the 1983 freshman class. This jolt will galvanize more institutions to action and more serious estimation and planning will obtain. Another jolt will occur in 1990 itself when another precipitous decline in freshmen, will be apparent. Birthrates dropped another six percent in a single year in 1972 when the Supreme Court ruled on the legality of abortions. The 1972 cohort will enter college as a very small freshman class in 1990.

The wise administrator, of course, will add retention programs to "keep the students they have" to the strategy of adult enrollment in his/her efforts to moderate enrollment shortfalls. The effort will be rounded out by more effective recruitment, development of new markets among the growing numbers of minority high school graduates and cooperative efforts with the military and corporations in the education of young people.

REFERENCES

Brazziel, William. "Waiting for the Older Student", AAHE Bulletin
(In Press).

U.S. Census Bureau. Population Characteristics Series P-20, No. 362,
1981.